

### FINAL RESEARCH PROJECT

# "THE KEY ROLE OF TEACHERS' LEADERSHIP IN THE FRAMEWORK OF THE CHANGING 21st CENTURY"

Facultad de Ciencias de la Educación

Licenciatura en inglés EAD

Alumna: Julieta

Digerolamo

Fecha:

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#### **ABSTRACT**

The 21st century is showing us a world in constant change. We have seen a huge technological revolution over the past few years, which enabled the introduction of global influences and access that would have been unheard of 30 years ago.

Students of any age have a smartphone in their pockets, giving them 24/7 access to the information highway of the internet. Everything they want to know can be found out on a Wikipedia page. This is the social, cultural and educational context in which teachers are immersed, and from this framework it is important to identify the key profile that is crucial for them to develop in order to meet the needs of this generation of learners. Globalisation has opened a whole new world for students and it is time teachers moved away from teaching what to think and learn to showing students how to do it.

This theoretical research work explores bibliography on the nature of our present times and the relationship with education and the actors involved in this area. Moreover, the focus will be on the concept of leadership and its association with teachers and their performance, proposing courses of actions related to the new necessary methodologies to empower teachers in their performance. It is an invitation to reflect on our practices and roles as educators and also to be sensitive to change and adaptation which are two key words of our present world,

#### Key words:

teaching, learning, globalisation, adaptation, change, 21st century students, teachers as leaders, leadership roles, emotional intelligence, communication, teachers as communicators, network thinking, academic environment, holistic development, power of words, challenges, resilience, redesigning education, design thinking models, culture.

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#### 3. INTRODUCTION

"To teach is to touch a life for ever" (Crista McAuliffe)

When approaching the issue of teaching as an abstract concept, we immediately feel that it is a long process in which multiple variables are involved. We assume that in this process there will be essential ingredients to successfully fulfil the aim of teaching the target content and consequently produce a significant learning experience. These ingredients include some key elements: the teacher, the students, the environment, the material, the input, the social cultural factors, emotions, and many other variables in a given context, in a given place.

The learning process in this changing and versatile world, our time in the line of history, is a challenge that nobody can deny, since our social and cultural framework has been suffering dramatic changes in many different areas. In this fast world, education plays a major role in empowering students to engage with challenges. The 21<sup>st</sup> Century is rapidly changing every dimension of human life (economically, Socially, technologically) and due to these rapid changes, complex problems are faced by educators.

Teachers of the 21<sup>st</sup> C have to create students of this century and to make them develop in a complex global scenario where the advances in technology have affected almost every area of our life: the way we talk with one another, the way we work together, the way we learn and teach. Learning happens everywhere, all the time on any topic, assisting any learning style. It is vital to have a close view on how we train and support teachers in their constant professional development.

In this final project, I will try to show the key role teacher's leadership plays in the contemporary context and all the variables involved in achieving a successful educational environment enriched by clever practices that aim at meeting the

needs of the 21st C student.

This research work aims to describe how the concept of leadership is key when defining a teacher's role today. Moreover, it will be part of this project to show how the development of communication strategies and skills as resources for teachers as communicators, and the concept of emotional intelligence are essential and are intimately connected in the learning environment and are vital for the requirements of this new students' profile.

Finally, we will also focus on the true revolution of this century in the educational environment: the transformation of the process of thinking and processing information. This transformation goes through the whole social features and is calling for so-called key competences in order to be able to deal with any sort of complex problems that dominates all facets of our society.

#### 4. METHODOLOGY, IMPORTANCE AND LIMITATIONS

This final research project is a piece of theoretical research that aims to analyse, think and rethink concepts and theories connected with the role of teachers in the 21<sup>st</sup> C and all the shades of meaning derived from that analysis. We have analyzed concepts, theories, methodologies and ideas that help us to understand and cope with a versatile and changing scenario in teaching and learning.

The aim of this project is to show how the role of educators has changed, and why they need to be emotionally intelligent leaders that can face a new learner's profile, which needs to be approached with new methodologies and tools.

We believe that the topic we have been investigating has a vital importance and it is healthy to open the debate and provide suggestions and conclusions based on theoretical and factual evidence.

We will identify, explore, analyze, and throw light on key concepts and relevant theories implicit in our area of research trying to draw a picture of the scaffolding that upholds our present piece of research. The key pillars - concepts to point out are the following:

- The Social and cultural context from postmodern society to our post postmodern world and the implications in Education
- The challenges of the 21st C
- The concept of leadership and why the association with today's teachers' role
- Emotional intelligence as a key ingredient in leaders
- The new subject-student; his needs and profile
- New methodologies to face the classroom

Finally, it is important and honest to admit that any research has limitations and shortcomings and, in this case, this research is by no means exhaustive but would like to contribute to reflection and understanding of the new trends in teaching-learning process.

#### 5. THEORETHICAL FRAMEWORK

Postmodernism can be described as a period when many ways of approaching reality changed and ended, "the ending of metanarratives as collective idealisms, the ending of history as the end of totalitarian systems, the ending of reality as a simulated end, the ending of seriousness as the end of nostalgia, the ending of inspiration as the end of literature's the ending of magic as the end of the author's magic trick, the ending of creation as the end of originality and the ending of the novel as the end of genre purity. Yet around 2000 we believe another ending was being talked about – that of postmodernism." (AG Apolloni, 2017)

According to Jean-Francois Lyotard (Lyotard,1979), Postmodernism is thus not a tendency of modernism, but the opposite. The postmodern man proclaims the distrust in the ideals of modernism which was mainly based on a utopic vision of human life and society and also the belief in progress.

It is also important to point out that postmodernism brings about the end of metanarratives. Metanarratives and grand narratives are narratives about narratives of historical meaning, experience or knowledge which legitimise a master idea that is intended to be believable and taken as true or sacred.

Another key postulate about the end of a modern cosmovision is the one that Francis Fukuyama proposed in his famous essay The End of History. He speaks about the end of history in reference to the end precisely of some religious and philosophical metanarratives.

Another ending is the end of reality as we used to perceive it and experience it. The term simulacrum is related to postmodern reality. According to Jean Baudrillard,(1980) who was a French philosopher and sociologist that analysed postmodernity and the philosophy of poststructuralism, reality is no longer a reality, as it is dominated by virtuality.

The virtual world where we are immersed is offering simulations of reality all the time. It is a world overwhelmed by media transforming it into hyper-reality. Hyperreality has replaced reality. We are crossed by the internet and the media and they create reality in most cases. The modern world with its idea of progress and enlightenment had a serious approach to reality. The end of seriousness is

part of postmodernism. In postmodernism, topics are processed in a complex way through ironic discourse. The idea is to avoid the nostalgic approach of modern ways, on the contrary, everything is turned into irony since irony is a way of avoiding reality and serious discussions. It can be said that irony is a filter in the postmodern cosmovision.

Moreover, inspiration also ends as the attitude that precedes creation. In the past, the poet was in a divine drunken state during inspiration and belonged to God. This idea was assumed in romanticism, questioned in modernism, and denied in postmodernism. If we consider the entire postmodern literature, it is a bricolage, that means a chaotic construction or creation from a diverse range of things and this can be applied to any area of Postmodern society.

For instance, if we take postmodern literature, it is clear that the notion of inspiration is denied. The writer of a given book takes the topic from different sources to structure the new text. And here the concept of a network of countless references and quotations is key to understanding the style of postmodern writers.

The fact is that postmodernism is a movement that comes after modernism and describes cultural, political, social, and artistic practices, but it has also come to an end as a period. Ssome academics, thinkers and sociologists such as Linda Hutcheon, Ihab Hassan, Andreas Huyssen, Raoul Eshelman, Alan Kirby, Tom Turner, Mikhail Epstein, Eric Gans, Robin van den Akker, Billy Childish, Charles Thomson and others who have spoken about the end of postmodernism. They have suggested names like performative (Eshelman), digimodernism (Kirby), post-postmodernism (Turner), trans-postmodernism (Epstein), postmillennialism (Gans), metamodernism (van den Akker) remodernism (Childish and Thomson).

Evidently, we are approaching or even inside a new social and cultural framework, and it is going to have everything to do with the digital technologies and new social media that are now part of our lives. Naming this era is difficult to do but what is true and certain is that postmodernism ended and with this, a new cosmovision is arising.

Another important item to include in this framework is the issue of teachers' roles and responsibilities. Some would say their role is to plan lessons, deliver

instructions, and assess students' learnings. Others would say their key role is to manage the classroom environment. Most people can agree that the classroom is a space where teachers pass on knowledge and skills to students that will be able to use it later.

The problem is sometimes that a large proportion of teachers are still receiving the same training, following the same curricula, and using the same teaching methods as before, so it is difficult to think that children can adapt to a constantly evolving world.

We have to admit that the concept of role in the teaching world is related to the idea of change, since social and cultural evolution in the last decades has brought the need of redesigning all the ingredients that are part of what we call: teaching.

Teaching experts, educators of various fields, politicians, and researchers are coming up with new solutions and programs. Instead of using old-fashioned methods, they're using new tools and techniques to equip children with the skills they need to succeed in the 21st century.

One example of this is student-led learning. This is a concept that is key for us in this theoretical framework. Student-led teaching and learning is an innovative form of active learning that empowers students with direct ownership of the learning experience. Peer-to- peer teaching is used to facilitate the acquisition of knowledge and uncover the processes that help create a sense of place. Students experience the issues that academics face when leading activities in the field. There are benefits and limitations of this approach that can potentially challenge the power relationship between student and tutor to the extent that the student is elevated to that of scholar. Empowering students with direct ownership of the learning experience teaches them more than just subject matter. Instead, they learn skills like leadership, organisation, time management, among others.

The expansion of information and communication technologies such as artificial intelligence has raised the level of required skills that human beings need. As we move into an age where people will commonly live beyond 100 years of age and have more career mobility, they need to become lifelong learners. Schools need to help us develop the ability to continuously learn. By promoting student-led learning, it becomes more possible for learners to 'learn how to learn'. At the same

time, learners can think more about how their fundamental learning at school will be applicable throughout their life. Being able to understand the meaning of their learning is a critical benefit. There is a desire to give students more agency over their education, from what they learn to how the classroom operates. With increasing recognition of the importance of transitioning students from school to the outside world, student autonomy has become a key area of focus.

Through student-led teaching, educators can equip learners with personal skills that will be essential in their lives such as confidence, leadership, autonomy. Skills also needed in what we have called the new scenario post-postmodernism also mentioned in this theoretical framework. A scenario that on one hand enables development, creativity, and innovation and on the other hand leaves thousands of people out of the system.

Another concept that is really important to add is working as a facilitator rather than an authority. Nowadays, there is a need to engage students through high levels of support, structure, and autonomy. A better-quality student-teacher relationship is developed by generating an environment of self-development.

The concept of the teacher as a mentor is key when thinking about the type of interaction and relationship needed in our present context. A mentor is somebody that helps someone to explore options and find solutions by guiding and coaching. While they teach the skills and knowledge that are necessary for a task, they then only offer support and guidance when needed. Instead of acting as a dominant expert, students and mentors are peers working towards the same outcome.

Teachers need to adapt their lessons and curricula according to the evolution of the new generation: digital natives. Getting technological tools into the classroom is a way of integrating technology but is not enough. It is necessary to encourage students to take control over their own learning process. They also need to go for those that encourage student-centred, project-based learning. Moreover, it is important to teach skills that align with the modern-day career.

In our present world educators need to be forward-thinking since the learner in the 21st-century classroom and expectations of what successful students look like have changed. Because both are continuing to evolve, educators need to adapt their methods of teaching if they want to engage their classroom and help shape

the future of their students.

We have to think together through this theoretical framework about two concepts that cannot be absent here since they are challenges to face: Change and adaptation as key skills.

Preparing students for the 21s implies recognizing first that the world of work has changed. Before, having a successful career involved going to college, starting in an entry-level role within a company, and climbing up the corporate ladder. Companies would hire based on a person's degree and help them develop into more permanent roles within their organisation. Now, this model is becoming less and less popular.

The world of work depends less on their corporate ladder. In fact, making upward progression is less important and common. Nowadays careers have become increasingly diversified. Thanks to new teaching methods, programs, and various other resources, children may not have to stick to one predefined and static career path. They will be able to pursue several multidisciplinary jobs.

With the above in mind, we need teachers that are capable of developing learning plans that will provide key tools to these new and adaptable adults. They must design learning units that prioritise the skills that students will be able to use in various disciplines. These must include problem-solving, critical and lateral thinking, communication, emotional intelligence development, and various other personal skills.

We believe that every student and every educator, in every classroom, deserves the tools and skills that set them up for success in building the future they want for themselves. Theories and strategies to approach education are in constant change in the 21st C. That is why it is more important than ever to understand how and where it's changing so that educators and schools can support students in preparing for challenges and careers that even today do not exist. Some concepts to bear in mind are new life skills and workforce preparation, collaborative classrooms, computational thinking, Student-led approach, digital development and all the emerging technologies, innovation in pedagogy.

These concepts are really important for teachers to have in mind since children need to have a more holistic education that goes beyond standardised testing to include social and vocational skills. Educating the whole person involves taking into account soft skills to be included inside curriculums rather than focusing on memorising and repeating information.

The world that is waiting for our learners needs to strengthen soft skills such as empathy, confidence, articulacy, and teamwork. The incorporation of these key qualities into lessons to be taught alongside traditional subjects like Maths and English is essential. Such skills are more important than academic qualifications to students' success.

#### Why the concept of leadership in this Theoretical framework?

We are going to understand the concept and its history. It is clear that recognizing a leader is something that one can see but it is more difficult to define what qualities and practices a good leader has.

Any person is a potential leader in spite of not having a coordinator or supervisor card or being the Head of an educational institution. Leadership is precisely something that can be developed throughout life. A leader may be considered a leader because of a formal relationship, provided by the possession of managerial rank in an organisation. Or a leader can be informal, someone who steps up and provides that guidance from within a group of people, not necessarily the person who has been given decision-making authority.

"Leadership Is the process by which an individual mobilises people and resources to achieve a goal. It requires both a set of skills that can be learned as well as certain attributes can be nurtured" (Lumen Boundless, 2015)

Some of the most common qualities that describe leaders are connected with their ability to inspire. In fact, one of the most important missions a leader has is inspiring others to achieve their goals while at the same time raising awareness and providing the necessary tools to reach the proposed objectives. Moreover, they are also key qualities: to challenge and encourage people. They can persuade and influence, and they show resilience and persistence. We can have different examples of leaders in society from a CEO, a prime minister, a general, a sports team captain, to a school principal.

In the past, there was a heroic way of describing a leader, The concept has had a clear definition for hundreds of years. They were strong people almost appointed by God "In Carlyle's book On Heroes, Hero-Worship and the Heroic in Society (Carlyle, 1840), the author dove into the lives of several men he deemed "heroes," like Muhammed, Richard Wagner, Shakespeare, Martin Luther, and Napoleon. He believed that history "turned" on the decisions of these men, and encouraged others to study these heroes as a way of discovering one's own true nature." (Lumen Boundless, 2015)

Defining a leader is not a simple job, since what makes a leader is all the elements such as passion, bravery, confidence, commitment, determination, ambition, inspiration, tenacity, emotional intelligence, assertive communication skills among others. This last one is essential because the ability to communicate is part of the everyday practice of the leader, since most of a leader's job involves communicating ideas, information, content, and strategies effectively to fulfil a specific task successfully. Leaders also function as role models; they are always being observed. In addition to this they should be capable of motivating and developing extrinsic and intrinsic motivation in themselves and in others enabling and fostering enthusiasm for projects and tasks.

Leadership also implies recognizing the potential inside people to develop and grow so that transformation and change become possible. It has been mentioned above the relevance of these two concepts in the framework of postmodern society.

The concept of leadership is included in this framework because in our FRP we want to show how important it is for the 21st C teacher to develop leadership skills in this evolving scenario that implies facing a new subject-student. Nowadays in the world of education and in the framework of teaching and learning, this concept of leadership is intimately related to a given profile needed to operate in the changing 21st Century world. These times need certain skills in teachers in order to adapt constantly to the social and cultural environment that is unpredictable and that need not the old concept of "hero" but a profile of teachers aligned with a key quality required: Emotional intelligence.

Emotional intelligence is a vital concept in this theoretical framework and closely

related to the concept of leadership and the role of teachers in the 21st Century. We arrive through leadership, to the concept of emotional intelligence. This concept is intimately connected with the construction of the new identity required for teachers nowadays.

A humanistic sort of leadership to lead, influence, facilitate and guide teams of learners in an assertive way understanding that good communication is a key element and a tool to face this new reality. These new learners are full of new ways and practices to operate in reality.

Humanistic, democratic, horizontal, assertive, communicative, and participative are some of the qualities needed in the kind of leadership we are interested in in this present work. Teachers need to possess this leadership to develop and carry out their work in the way this epoch needs.

# Why Emotional Intelligence is Needed in Leadership? What is emotional intelligence?

We have to add in this theoretical framework the concept of Emotional Intelligence since it is a key ingredient in the profile of teachers and learners of the 21st Century.

The concept of emotional intelligence is intimately connected with the construction of the new identity required for teachers in the present times. What is Emotional intelligence? In 1990 Peter Salovey and John Mayer proposed their own theory of EI, while in 1995 Daniel Goleman wrote a revolutionary book: "Emotional Intelligence: Why It Can Matter More Than IQ". This book opened a debate about Emotional intelligence and the traditional way of perceiving intelligence that was IQ. Goleman (1998) reformulated EI in terms of a theory of organizational and job performance. According to Goleman (2000, p 37), "a leader's singular job is to get results. But even with all the leadership training programs and 'expert' advice available, effective leadership still eludes many people and organisations". One reason, says Goleman, is that such experts offer advice based on inference, experience, and instinct, not on quantitative data.

"Mayer and Salovey's (1997) construct appears to be the framework most likely to

produce a construct of emotional intelligence as it addresses emotion and intelligence criteria" (Jordan, 2000, p.123). The concept of El has been studied and developed by several scientists and researchers. The concept of multiple intelligences (Sternberg's,2003) suggests that interpersonal and intrapersonal intelligence are unique and that they are different from the IQ (the general intelligence) associated with logical type and Mathematical, or general intelligence.

The Mayer-Salovey Four branch model of emotional intelligence states that there are four branches of skills that are related to emotional intelligence. The first two branches are Perception and Facilitation. These two abilities or skills are connected with feelings and the capacity to perceive emotions in the communication with others in an effective way and also the possibility to develop emotions in an assertive way to enrich how we think. The other two branches are associated with being able to calculate and plan about our emotions.

Research exploring the neural circuitry that governs emotional awareness (Lane, 2000), as well as additional emotional and social aspects of this concept (Bar-On et al., 2003; Bechara& Bar-On, in press; Bechara et al.,2000; Damasio, 1994; Lane & McRae, 2004; LeDoux, 1996), provides tangible evidence of the anatomical foundations of this wider construct which has been questioned as a myth that is far from scientific.

The pre-eminence of IQ as the standard of excellence in life was unquestioned; a debate raged over whether it was set in our genes or due to experience. Goleman, Mayer and Salovey, used the phrase EMOTIONAL INTELLIGENCE to summarise many scientific findings while the incipient birth of what we now call neuroscience was starting. The concept of EI has been embraced lately by educators, in the form of programs in "social and emotional learning".

EI (emotional intelligence) concept is included in the present framework to point out one key ingredient of educators and teachers who need to develop this type of intelligence for their own sake but also for the sake of their students in order to teach and transmit not only competencies in maths and science but also the mastery of the essential skills for living in the 21sr C: self-awareness, self-regulation, motivation, empathy, social skills, skills for living.

#### The new student-subject

Another important fact is the birth of what we call the new student subject: a learner with a new profile, new needs, and consequently requiring new approaches in his whole education. These new approaches will be mentioned and explained in this theoretical framework understanding that, as it was suggested in the limitations, there may be more areas to explore.

We have chosen three lines of thinking connected with the idea of learning to learn and learning to develop strategies to improve the learning process. They are Design thinking, Network Thinking, and Lateral thinking. We are going to briefly describe the main concepts in the present framework.

#### Design thinking

The concept of design thinking implies designing through different steps which are cognitive, strategic, and practical processes such as context analysis, problem finding, framing, ideation, and solution in a creative way. This way of approaching any process of creation involves developing creativity, empathy, cooperation, feedback possibilities and an enriched process of evaluation since the objective is to reach the best solution, the best product, the best idea (Nigel 2011).

The new XXI schools include new ways of learning for students to cope with the new needs that this new subject-student requires. Abilities such as creativity or digital competencies are protagonists now. The learner is at the centre of the learning process. Innovation, multiple intelligence, and digitalization are relevant concepts. These changes of models and paradigms not only include Design thinking in the classroom but also the students are in a constant process of open innovation collaborating constantly with partners and developing other skills such as empathy and entrepreneurship.

All these new elements determine new ways of evaluation and task design. From this perspective, evaluation is more connected with learning through project formulas rather than tests and traditional exams. There are different phases in Design Thinking:

**DISCOVERING:** the student has to understand the challenge given in order to later prepare the investigation from which he will obtain inspirational information.

Example: Turn the classroom into an inspirational place.

**INTERPRETATION:** Once he has the information the learner will try to make sense taking into account all the material, facts, perceptions, feelings and with all these ingredients he will try to discover new opportunities to improve his project. It is important to create an atmosphere where all the students feel part of. Generate a space that enables cooperation among them.

**IDEATION:** is the creation of ideas and the development of them. Following our example: create a place where the use of tables and chairs could be eligible.

**EXPERIMENTATION:** ideas need to be tangible, lived, and tested by students through prototypes. They have to experiment in order to test and by doing this new information and data can be collected.

**EVOLUTION:** implies that the process carried out generates learning from which students will do a follow-up with their teachers and by revising these learnings they will improve their solutions in a process of constant improvement that will end when they decide. According to this approach when you work on a project the most important thing is not the result but the learning process, paradoxically this generates better results. Through different phases of the creative process, students also develop their Ideation skills. Creativity is enhanced and students experience a lack of fear of committing mistakes while they also improve in their abilities to work in teams. Cooperation and Collaboration become two more elements that are incorporated as key values.(Laurillard, 2012).

#### Lateral Thinking

We think it is important to include in this Theoretical framework the concept of Lateral Thinking. This term was introduced by the Maltese psychologist Edward de Bono, who proposed the teaching of thinking as a subject in schools. And this concept is different from the popular "critical thinking" which is about judging the true value of something and looking for errors. Edward de Bono, (De Bono2006) proposes four types of thinking tools:

- 1<sup>st</sup> thinking tool: idea-generating tools intended to break current thinking patterns, routine patterns, the status quo.
- 2<sup>nd</sup> thinking tool: focus tools that help the person broaden where to search for new ideas.
- **3**<sup>rd</sup> **thinking tool**: harvest tools intended to ensure more value is received from the idea-generating output.
- **4**<sup>th</sup> **thinking tool**: treatment tools that promote consideration of real-world constraints, resources, and support.

He also suggests some techniques such as Random idea, Provocation techniques, Movement techniques and Challenge. In the case of the Random idea, the thinker chooses an object at random, or a word from a dictionary and associates it with the topic or situation they are analysing, they are thinking about. The Provocation is a statement that we know is wrong or impossible but used to create new ideas. It is a way of thinking out of the box, learning to think of different possibilities. movement techniques are used to produce as many alternatives as possible in order to encourage new ways of thinking about both problems and solutions.

As regards the Challenge as a tool, it is designed to ask questions in a non-threatening way about a problematic situation or the way things are done or tasks are performed. The answer to the question: why? leads to open the door to new creative possibilities and ideas that may improve the way things are done or solved. In this way, the concept of a challenge since the idea is to challenge status quo and traditional way of viewing things

Finally, I would like to include in this framework the idea of NETWORK THINKING. The author behind this concept is Sonia Abadi. She is an Argentine physician, psychoanalyst, and researcher. She introduces the concept of network thinking since she believes that we need a new way to see reality because reality has changed, and we cannot continue operating in the world with the same practices of modernism or postmodernism.

As we have been exposed in this theoretical framework full of ideas and concepts, we are in what is called POST POSTMODERNISM, and from that point

of view, network thinking is a tool to have a new mindset. For teachers and educators, in general, knowing and exploring this concept is vital since it implies connecting ideas, people, and projects with the purpose of producing knowledge growth and opportunities.

In the classroom is a key tool to face the new subject-student teachers are working within their daily practice. "The true revolution, the one that can make the difference in our way of living and working is the transformation of the processes of thinking origin of creativity and innovation and of life quality." (Abadi Sonia 2014)

Formal education from Kindergarten to University focuses on linear thinking that establishes logical connection and relationships of cause and effects to do this the natural tendency of kids to perceive reality is changed. We are taught to think and analyse in different parts, to discriminate the true from the false, fantasy from reality, possible from impossible coherent and incoherent; and in this way, we mutilate our most creative and intuitive way of thinking that has to do with creating and believing beyond fixed rules and laws. As grown-ups domesticated obedient, we are surprised to find any provocative thought or extravagant and creative that enriches and widens our perception and imagination.

On the one hand, the concept of network thinking applies to other methods of knowledge investigation because it incorporates the versatility and diversity of the unconscious processes as sources of new links to the net. On the other hand, the mentioned concept integrates the new discoveries about the laws that rule the behaviour of human nets. These laws are also present in the neuronal connections and in the development of creative thinking processes.

Nowadays we enjoy in some way the benefits of a universe of nets that we share, enjoy and sometimes suffer. But this is because the human mind has evolved and technology and the development of knowledge are a certain and tangible reality.

But precisely for the reasons mentioned above we have to "aggiornar" our mental models, our mindset; the way we interact today has enabled us to overcome the fragmentation of knowledge. The limits between hard and soft sciences are not so clear today but blurred. It is a characteristic of our times that the boundaries

between the different types of thoughts have vanished. Even within those changes our mental models are still evolving.

And although we have already begun to develop integrative thinking in many aspects, we continue to function from linear thinking and the departmentalization of our lives and our mind.

"To perceive within a network is to get in tune with the world and with intelligence and creativity of other open minds with available valences to establish links with the environment and the opportunities" (Abadi Sonia 2014).

# 6. <u>CHAPTER I:</u> "A NEW HYPER CONNECTED WORLD: A NEW TEACHER'S PROFILE NEEDED

It is clear that we are going through times of fast unimaginable change, and educators of any area of studies are constantly trying to adapt and adjust to a versatile environment. The main aim they have is precisely focusing on preparing students for a changing world. Computers, smartphones, and all the wireless devices that are everywhere are an unstoppable wave of change. And this change is faster than the change in the education system. Technology is changing the world at an unprecedented rate. We have already seen the mass adoption of mobile computing devices, with computational strength, we never would have imagined a few years ago. Intelligent systems, artificial intelligence, machine learning, and big data analysis. Every sector of our society is in a technological revolution atmosphere. As every sector of society becomes more technologically advanced, it adds to its own (and the world's) body of knowledge, both in terms of discoveries in its field and the data that goes along with it.

The rate at which knowledge is growing is really fast. The doubling of knowledge used to be measured in decades, if not centuries. It's now measured in years. When technology and knowledge are advancing so quickly, how can schools stay at the forefront of the disciplines it teaches and make sure students are prepared for the world as it will be. Part of ensuring students are prepared to enter the workforce in a time of such widespread change and uncertainty is to recognize where the career opportunities of the future lie, and what the necessary skills will be to seize them.

Educators need to focus on looking to what the career opportunities of tomorrow will be while not only providing students with the foundational base knowledge they need, but also on providing them with critical thinking and problem-solving skills, analytic capabilities – and curiosity and imagination – which have all been identified as critical 'survival skills' in the world and in the workplace of the future.

As we have seen, this is the context from which teachers and educators have to operate on reality. Their daily practices should be revised in order to cope with this subject-student with different characteristics in an ever-evolving world. When we use the word profile, we want to mean the building of a professional with certain key characteristics: a teacher that can inspire, motivate, facilitate, conduct, and share the necessary tools to 21st C students. The way we used to teach has stagnated for many years. It is time to realise that we need a change in the way teachers develop their teaching practices to stay up to date.

Today, teachers do more for our children than simply teach them. Often, they are also parents, a friend, a counsellor, a disciplinarian. Their job is not only to educate our children but also to counsel them, to be their friend when they need one, to be a shoulder to cry on, to help them become valuable members of our society. It's time for teachers to embrace their new role in the classroom as a mentor to children. Teachers can guide students by being a positive role model for them, particularly for children that don't have this positive influence at home. By incorporating a teacher-mentor in the classroom, teachers can coach students and encourage them to adapt learning methods that suit their own learning style, thus challenging them and inspiring them to learn.

Learners of the 21st C can find anything they want to know on a Wikipedia page, so how can a teacher possibly hope to compete with that? As they get older, students soon find that they can skip going to lectures as they can access the same information online in YouTube videos and webpages.

It's time to admit that a change is needed to stay up to date. Perhaps students can find out everything about a subject online, but that may not be the most thought-provoking and interesting way to learn the material. This is where teachers can step in, to present the material in a new way. Technology can be used to guide the students' learning and engage them in lessons, rather than simply to provide them with the knowledge, changing the role of the teacher from the 'font of all knowledge' or an instructor, to a mentor/coach. This leads to a student who is more conscious of their learning, more independent, and active in the process, and hopefully inspires them to become lifelong learners. No longer do we need to rely only on the syllabus to impart our knowledge to students. Globalisation is opening up a whole new world for students, giving them

access and information they could only have dreamed of a mere 30 years ago. It is time teachers move away from teaching what to think and learn, to showing students how to think and how to learn.

The concept of globalization is intimately connected with all the changes society has been suffering. In fact, in relation to learning Globalisation has enhanced the ability of learners to access, assess, adopt and apply knowledge. It has also allowed them to think independently to exercise subjective judgement and to collaborate and cooperate with others to make sense of new situations.

It is also important to say that Globalization implies not only a new social and cultural reality but also new ways and a new cosmovision of reality. Globalisation is a word that connotes several meanings to people. There have been long debates about the positive and negative aspects of a "global world". What Marshall Mc Luhan called the "Global Village".

On the one hand, some people believe globalisation is dangerous and has brought undesirable consequences to society. On the other hand, another group of people regards this cultural phenomenon as a possibility and opportunity to make the world more connected democratic, and informed than before.

It is clear that Globalisation has completely transformed the world, especially the economy, which now is interconnected and interdependent and also more competitive and more knowledge-based. As regards education, we can think in terms of global education. What does this mean? The interconnection of methods of teaching, the possibility of sharing knowledge and generating debate and new ideas and experiences in the framework of the teaching-learning process.

In addition to this, the growth of multicultural awareness from an early age enhances the integration of different ideologies from various societies and also provides a more holistic understanding of problems and certain situations around the world since news and information, in general, is at hand.

The Global world also enables the new subject-student to acquire and utilise knowledge in a more independent way while exercising judgement and collaborating with others to make sense of new situations. This implies working in teams and developing skills in group dynamics: compromise, debate abilities, persuasion, organisation, communication, leadership, and management. Soft

skills every day are more required within any educational curriculum.

Moreover, globalisation produces an increased quantity of scientifically and technically trained people; knowledge is the key word and key factor in our present time. This is the information age, a challenging period where globalisation breaks the space and time boundaries, using advanced information and communication technologies, a new system of knowledge education and learning should apply a wide range of synchronous and asynchronous activities that aid teacher and student in breaking boundaries of space and time.

Rethinking education is a consequence of a reality of this Global framework of 21st C. A context in which the exchange of ideas and experiences in the use of educational technologies is key to encourage exploration and experimentation in order to push the frontiers of the information technologies and communications for more effective learning.

What is more, another effect of globalisation on education is the global sharing of knowledge, skills, and intellectual assets necessary to multiple developments at different levels. This also contributes to producing synergy and creating values such as mutual support, collaborative behaviours and promotes acceptance to cultural diversity across countries and regions. It is also important to add that Globalization is a reality that can increase technological gaps between advanced countries and less developed countries.

All that has been said and described implies a new way of being in the 21st C, a new subject in a new world and consequently a new learner type and the vital need for new teachers' profile to cope with the challenging learning-teaching scenario.

#### 7. CHAPTER II: "TEACHERS AS LEADERS: AN INVOLVING CHALLENGE."

We have explained and tried to think together about the role and profile of teachers in the framework of a world that changes at a speed never before thought.

Now we believe there are three elements- that we have also shown in the theoretical framework- that are vital for rethinking the profile and role of teachers: Emotional intelligence, leadership, and communication.

Three pillars from which they can start developing the necessary strategies to succeed in teaching, taking into account of the variables implied in the new scenario

#### Teachers as communicators

Being a Competent communicator is key when describing a vital quality of a teacher or educator in any field. Teaching is more than curriculum content. It implies relationships, feelings, perceptions, etc. Good Interpersonal communication depends on good intrapersonal one and that is associated with helping our students to develop "know yourself", a key principle of emotional intelligence.

Successful education is thus connected with the ability to communicate properly, and this is a skill that should be developed. Diversity is a keyword in today's classrooms and sensitivity to intercultural differences is another important point. In this sense, developing communication skills, vital soft skills, is really necessary in a really complex world. Cultural awareness is an ability to develop in learners more and more every day.

When we approach the concept of communication, we have to define it as the ability that human beings possess that make them precisely unique. The history of ideas is the history of the communication of ideas and from this concept communication is conceived and worked as a process of transmitting knowledge, ideas and sensations from one person to another.

Communication is participation in something common, not a mechanical action, but perceiving the same degree of internal commotion. Through communication

we build links and develop as individuals and social subjects, it is precisely the essential characteristic of a man; his communicative capacity.

Man is a social being who needs communication as a key tool for his personal and professional growth and development. Communication is language; it is verbal and nonverbal, it is spatial, it is symbolic. Everything communicates, and in the Era of Technology and Communication teachers should master this ability and train themselves to be good communicators. It is vital for teachers to take into account that communication is a major tool, and teachers are communicators more than ever in the framework of the 21<sup>st</sup> C.

#### Emotional intelligence and Leadership; two pillars that go together

There is a saying by Aristotle "Anyone can become angry—that is easy. But to be angry with the right person, to the right degree, at the right time". In a way, it describes how emotional intelligence operates.

Emotional Intelligence is Needed in Leadership. As we have explored in the definitions of emotional intelligence, we see that is as important or more sometimes that IQ in terms of performance and in relation to the relationship with others and in relation to fulfil objectives and succeed in what we want to achieve. Within the role and profile required for the new teachers needed we need these qualities to cope with new students' profiles.

It is important to point out that classrooms are places where emotions play a vital role. They are emotional places where learning and feeling go hand-in-hand. It is vital for teachers, as we have shown in our theoretical framework, to cope with the profile of learners that are in the classroom today to develop the strategies necessary to be emotionally intelligent and to learn and teach to develop emotional intelligence. Daniel Goleman acknowledges that "the extent to which emotional upsets can interfere with mental life is no new to teachers: students who are anxious, angry or depressed don't learn; people who are caught in these states do not take in the information efficiently." (Goleman 1995)

We have seen through the concepts in our TF that not being able to manage our emotions properly has a serious negative impact not only on learning in general, but also on society. Emotional Intelligence (EI) can be taught and learned.

One of the pillars of emotional intelligence, within the concepts that define this type of intelligence, is assertive communication. Classrooms are places where emotions are present, and where communication plays a key role and here it is good to point out that when we speak of communication and emotional intelligence the result should be: assertive communication. Assertive communication is defined as the ability to speak and interact in a manner that considers and respects the rights and opinions of others while also standing up for your rights, needs, and personal boundaries.

We are in times of diversity of opinions and open-minded criteria on many fields, so we need to train our abilities in listening, speaking and understanding. Although we may disagree, assertive communication is part of Emotional intelligence abilities and as a consequence of the profile of a leader in the framework of 21st c.

Emotions are in the classroom in the form of excitement, hope for success, pride in their accomplishments, being surprised at discovering new solutions, experiencing anxiety about failing examinations, feeling ashamed over poor grades, or being bored during lessons.

Moreover, admiration, empathy, anger, contempt, or envy are feelings that both teachers and learners experience in their personal lives and in the relationship they establish in the classroom. Nowadays more than ever, students bring emotions to the classroom that concern events outside the academic context but can nevertheless have a strong influence upon their learning, such as the emotional turmoil produced by stress within the family. The so used expression called "stress", that is overused and not always with the correct meaning, is a phenomenon of daily life and daily teachers' practice. Emotions are powerful and can have important effects on students' learning and achievement.

Daniel Goleman's views on implementing social-emotional learning in academic contexts are vital to the classrooms we face nowadays. The concept of Social and Emotional Learning (SEL) is a framework that places schools as a place where emotions and social skills have an important part. The SEL skills are designed to create attitudes, and behaviours that promote healthy social relationships, personal well-being, and academic achievement. The SEL approach is founded

on the notion that behaviours are caused by particular risk factors and optimal learning emerges from relationships that are both supportive and challenging (Elias & Weissberg, 2000).

Social interaction at school is an issue that cannot be underestimated if there is an objective to reduce negative social interactions, maximise learning, and develop key skills in social and emotional learning. It is recommended that schools integrate SEL Benefits of Social and Emotional Learning in the academic curriculum to enhance student strengths and prevent classroom problems. With the publication of **Goleman's Emotional Intelligence (1995)**, Goleman defines emotional intelligence as we have seen before, as a human skill which includes how an individual handles their own feelings, how well one empathises and gets along with other people (**Edutopia, 2009**). He proposes that individuals are born with general emotion intelligence that determines their potential for learning emotional competencies.

Goleman also believes that children who are better able to manage their emotions and empathise with others will in turn pay better attention, take in and retain information better. From Goleman's point of view, emotional competence is a learned capability based on emotional intelligence that results in an outstanding performance at work or school. He believes our emotional intelligence determines our potential for learning the practical skills that are based on its five elements of competency: self-awareness, motivation, self- regulation, empathy, and adeptness in relationships (Goleman, 1995). It is important to note that Daniel Goleman is a co-founder of Collaborative for Academic, Social, and Emotional Learning (CASEL) which was established in 1994.

The need for social and emotional skills is also a key issue. Soft skills are a reality that educators have to face. More than ever, we have to think of teachers as leaders in classrooms and education environments where teaching involves the whole student, bringing together mind and heart in the classroom. Education should include essential human competencies such as self-awareness, self-control, and empathy, and the arts of listening, resolving conflicts, and cooperation. Bringing intelligence to our emotions is a NEW subject to teach and to develop as teachers.

The third pillar is leadership, and this is not disconnected from emotional

intelligence because according to Collins Concise English Dictionary, a leader is a person who rules, guides, or inspires others; the head. According to Word Reference Random House Unabridged Dictionary of American English © 2019.

The key role of a leader is guiding or directing the head, as of an army, movement, or political group. The teachers profile needed for teachers today is aligned with the qualities of a good leader to be prepared for the challenges of teaching in 21st C classrooms.

Responsibility and action are two good words for leadership. Every teacher has the ability and the duty to be a leader in the classroom so as to guide, accompany, motivate and inspire students to succeed. However, the teacher should develop this expertise and fulfil this. With leadership as part of their indisputable role, the teacher can influence the culture of the classroom and empower students. She or he will build strong relationships with student and exhibit the competence and confidence to inspire and motivate them; particularly considering the challenge of dealing with the new changing culture of the 21st century

But the question is 'What Makes a Leader?',

**Goleman (1998)** states that the five components of Emotional Intelligence are:

Self-Awareness, Self-Regulation (or Management), Motivation, Empathy, and Social Skills (Relationship Management). It is clear nowadays that the range of abilities that constitute what is now commonly known as emotional intelligence and Leadership are totally connected through the following pillars:

#### Self-Awareness

This ability implies that you are aware of your emotions, you know yourself and you know that developing the ability to recognise your emotions is essential as it is the capacity of realising that you have strengths and weaknesses.

#### Self-Regulation

The possibility that a leader regulates himself implies that he or she can control his /her communication in an assertive way and can take decisions with self-control and in a rational way, understanding that flexibility and commitment are

vital as a leader.

#### Motivation

Self-Motivated leaders are quality and goal oriented. Motivation is like an engine that is present in all the actions that a leader performs. Passion, commitment, clear objectives, and the aim of reaching excellence are present in the concept of motivation.

Motivation is a positive movement with clear aims and it implies involving others in the search of new ways of doing things and new ideas to incorporate and new horizons to reach, facing challenges with optimism. The profile of motivated leaders implies optimism as a part of their personality mindset; it might take practice but it's well worth the effort.

#### Empathy

When we think about empathy, it is clear that leaders should know the needs and personalities of their teams and know how to put themselves in their situations. In our times of adaptation and change, empathy is essential since conflict is always there and developing the ability to see things from other people's situations is crucial.

#### Social Skills

Human beings are social beings essentially, so leaders need to develop social intelligence to be good communicators of the ideas they want others to understand and put into practice. Again, leaders who possess good social skills can manage difficult situations in an assertive way. Teams are people with conflicts and they need somebody that behaves in an empathic way.

#### Methodology

Behind good leaders are also methods of performing plans are courses of action. The way they choose to do something is part of a bigger plan. They are strategic thinkers without forgetting that flexibility is also needed.

We firmly suggest incorporating all the elements mentioned as part of the scaffolding from which teachers operate in the environment where they perform their practice of teaching. It is vital to understand that to be true leaders and

conductors, teachers need to develop their own emotional intelligence and communication skills.

#### 8. CHAPTER III:

## "TOWARDS THE TOOLS TO FULFIL A SUCCESSFUL TASK: TEACHING IN THE FRAMEWORK OF POST POSTMODERNISM"

We believe that NEW APPROACHES AND METHODOLOGIES needed should meet the MEETING THE NEEDS OF STUDENTS, students that we have already described as new subjects with new identities and needs.

We have explored in our TF concepts and theories that are valid for us to enable teachers to develop successfully in their new role as leaders of teams of learners that learn differently from modern or postmodern students, that interact differently, and have a different cosmovision and relationship with reality. Within these concepts and theories, we mentioned: Student centred learning, critical thinking, design thinking, lateral and creative thinking and network thinking.

We have seen that Student-centred learning involvesmethods of teaching that shift the focus on the student. In original usage, student-centred learning aims to develop learner autonomy and independence by putting responsibility for the learning path in the hands of students by imparting to them skills, and the basis on how to learn a specific subject and schemata required to measure up to the specific performance requirement.

Student-centred instruction focuses on skills and practices that enable lifelong learning and independent problem-solving. Student-centred learning theory and practice are based on the constructivist learning theory that has to do with the learner's critical role in constructing meaning from new information and prior experience.

The central role of students is the centre of this approach, they are put first and their voices and needs are listened to in order to answer according to them to enable a learning experience that enriches them in a holistic way. This active performance of the students changes the classical teacher's role and makes teachers active facilitators that help students to develop a responsible attitude towards their learning path.

There are some theorists such as John Dewey, Jean Piaget, Vygotsky, who have informed the move to student-centred learning. Their ideas were revolutionary for the development of education. The concepts of learning as a social and experiential process have put the focus on experience as a pillar in education. The belief that a classroom is an environment in which students could learn to think critically and solve real-world problems was the best way to prepare learners for the future.

Another distinction from a teacher-centred classroom to that of a student-centred classroom is when the teacher acts as a facilitator, as opposed to an instructor. Guiding students is essential rather than making them incorporate new input. Learning from this point of what they are doing and experiencing, it is paving the way to incorporate content meaningfully and that is always a personal and subjective process. The concept of scaffolding is really important to foster independent thinking.

Thinking together through a collaborative way enhances interaction and the possibility of exploring and discovering knowledge with the teachers guiding and facilitating through tools that may be necessary and fostering transferable skills such as problem-solving, critical thinking, and reflective thinking.

#### Critical, Lateral, and Creative Thinking

The 21st Century is a time of complexity in different orders. In order to excel in this ever-changing world, young adults need to be capable of thinking critically to be creative, innovative and adaptable. Critical thinking – the ability to think clearly and rationally– allows one to properly understand and address issues effectively. This form of purposeful thinking is at the core of effective learning.

Thinking critically implies the possibility of evaluating knowledge, clarifying concepts, seeking possibilities and solving problems using logic, imagination, and creative resources. A student that can develop critical thinking would be able to think broadly and set down the right path in facing today's challenges at school and beyond. It is vital for teachers to prepare the correct environment in which learners can exercise their critical-thinking abilities, especially during their formative years.

We have been discussing the necessity of generating an innovative and inspiring approach that values the child as strong, capable, and resilient, rich with wonder and knowledge. In this way, students are enabled to think critically in order to understand their world and its place in it. With a strong framework in critical thinking, these students will be able to develop the necessary 21st Century skills that they will continue to use in college and life thereafter.

Today's students and tomorrow's leaders need another set of knowledge and skills. These 21st Century skills include the ability to collaborate and communicate and analyse and address problems. And they need to rely on critical thinking and problem solving to create innovative solutions to the issues facing our world. But this is not enough; we have to go ahead with some more steps in the way we think.

When considering different ways of thinking we have to distinguish for instance Critical thinking and Lateral thinking. The first is concerned with judging the truth value of statements and seeking errors while the second one is more concerned with the "movement value" of statements and ideas. A person uses lateral thinking to move from one known idea to creating new ideas. Thinking is the mental process, the act and the ability to produce thoughts. People think about almost everything and anything. Meanwhile, critical thinking often means "thinking about thinking." In a sense, it is a deeper form of thinking about a particular issue or situation before actually deciding and acting; while Lateral thinking is solving problems through an indirect and creative approach, using reasoning that is not immediately obvious and involving ideas that may not be obtainable by using only traditional step-by-step logic.

We have explained in our theoretical framework that the term was coined in 1967 by Edward de Bono. He wanted to show a new manner of solving problems using an indirect and creative approach via reasoning that is not immediately obvious. It involves ideas that may not be obtainable using only traditional step-by-step logic. For this reason, we consider Lateral thinking a vital tool for education because it is the key to finding new and better ways to do things. Lateral thinking is a tool for creativity which leads to innovation.

Innovation is the name of the great challenges our students face and are going to face even more in the future. Developing lateral thinking is developing a tool necessary for competitive advantage and survival in a world of turbulent changes. Thinking and how to improve the processes of it should be part of the Curriculum. The world has been changing and thinking cannot be detached from the teaching of information Knowledge.

Within the teacher's role there should be one dedicated to teaching thinking through techniques that focuses on aims, goals and objectives while considering all factors and variables as a whole cosmovision of a given situation. Teaching to create VALUE and possibilities not thought before. Teaching to explore and open up to other ideas and answers to the given problem or situation. It is important to teach THE RIGHT ANSWER, but it is not enough for the 21st C students. This way of thinking is far from dogmatic.

#### Innovation in Education means Design thinking

The process of Design thinking is one experienced not only by designers, but also by all great pioneers in art, science, music and business. In these changing times, the claim on education is that it should go beyond the realm of cognitive knowledge and empower students with meta competences that not only include learning and memorising information but also the training of other skills like critical thinking and creativity that will allow them to be able to adapt to new changes in the near future. Therefore, a shift is needed in the classroom: from mere knowledge transfer to the act of actively involving students and their full potential through constructivist learning.

Such a challenging task could not be met without certain practical problems. It is well known through theoretical findings that constructivism posits many advantages to learning that other approaches do not have. However, its implementation in the classroom presents some difficulty: the acquisition of knowledge continues to be fragmented as different subjects are taught in isolation from one another, lesson plans are not designed to help teachers carry out holistic learning, and when trying project work or interdisciplinary teaching, teachers end up feeling frustrated because of a lack of a clear process to follow and the

experience of uncertainty and chaos.

What is really important to acknowledge is that doubt, frustration and confusion are all to be expected as part of a learning process and also, as part of life experiences. If 21st century teachers hope to develop in students the set of new skills that society so urgently needs, then constructivist learning needs to be implemented through the practices of Design Thinking that will make teachers feel supported in their search for new practising methods.

The key competences that educators are seeking to provide in these challenging times include knowledge, values, skills and attitudes. Harvard professor Tony Wagner calls them the "seven survival skills for careers, college, and citizenship" (Wagner 2011):

- critical thinking and problem solving.
- collaboration across networks and leading by influence.
- agility and adaptability.
- initiative and entrepreneurialism.
- effective oral and written communication.
- accessing and analysing information.
- curiosity and imagination.

In this search, Design Thinking provides the tools needed for constructivist teaching to occur and succeed. Once success is achieved and a challenge solved, teachers and students will likely get a positive reinforcement for their actions and this feedback will lead to increased motivation and the implementation of more constructivist learning.

The key to teaching these metacognitive skills that we have been mentioning, is the use of a systematised process. Certain phases need to take place in order for constructivist learning to occur; the whole process with each and every step sets the frame for this kind of teaching. During the process and taking into account different students' needs, the teacher will be able to emphasise the phases she considers most necessary to the achievement of determined learning goals.

Some aspects of project-learning include: setting new content and information associations, resolving team crises, providing feedback in different stages, among others. These challenges may be difficult to tackle but are also decisive for developing metacognitive competencies in students. With the process on hand, the teacher will be prepared for the challenges that could arise during the thinking process, being able to solve them and further implementing constructivist learning.

#### A Challenge of the 21st C: Network thinking

Networking is part of and used in multiple fields. Today a new revolution in neurosciences shows us a functioning of the neurons in highly plastic networks, connected in diverse and versatile ways, confirming psychoanalytic hypotheses.

On the other hand, if we study one of the younger sciences, the dynamics of networks complex, we will learn that all living networks are composed of ordered loops, coherent, formal and also of random, informal ties, of great versatility and with tendency to expansion. And that these two types of ties produce network effects that can be reproduce (Abadi Sonia ,2014). The technical theoretical model called Network Thinking integrates concepts from psychoanalysis, advances in neurobiology and dynamics of complex networks. It derives from the recognition and legitimation of the paradigm of networks implicit in Freudian theory, relies on the notion of Winnicottian transitionally, as primary and secondary process integration system and as a construction system intersubjective and applies to the understanding of thought and its inhibitions.

The notion of Network Thinking takes into consideration three interwoven levels. The integration of intuitive thinking with linear logic, incorporating floating attention to focused attention, and empathic connection with the other. It is in these states where they display both creative thinking and shared creative experiences.

Network Thinking is a resource that highlights an innate ability, which is often lost with formal education: our natural ability to function in network systems. In the jargon of the Internet, to surf the networks. That ability is what the Thought in Network seeks to recover, recognize, legitimise and be able to use at will.

The concept of Online Thinking reveals a thinking that is neither individual nor collective but connective, which occurs in the intermediate space between one thought and the other. When thought operates in a state of free association and floating attention, stimuli not only act as generators of linear responses or defensive reactions but that spread through the web of ideas operating in the manner of a "source of inspiration".

In contrast, in a state of focused attention the stimuli are perceived as threats that incite defence, closing the network of thought. And this Network Thinking is not only intellectual, but always integrates the emotional and the corporal. This concept is vital since we can think of a whole approach where the mind connects and produces sense.

Today we know remarkably more about the workings of the mind, and how to develop functions that we previously considered the innate genius of a few, or education privileged of others. It is vital for teachers and learners to know and experience this way of thinking to incorporate in their routines and practises.

Thinking in Network, as well as a theoretical model, is a training method that integrates the various forms of knowledge. Thus, intuition becomes an ally of intelligence rather than opposing it. Emotions do not create confusion but reinforce certainty regarding what we objectively perceive. Creativity takes shape in achievements.

Network thinking is the activation and training of a state of mind that allows us to be at the same time, imagining and realising, interacting with others and the world. It's a model necessary to perceive and process new forms of presentation of reality: an open universe, interconnected and constantly flowing. We firmly believe that this model is also needed as a tool for teachers since it allows us to break with old ways of thinking and incorporate new ways of understanding reality.

#### 9. CONCLUSIONS, IMPLICATIONS AND POSSIBLE COURSES OF ACTION

We have thought together and analysed through a theoretical framework different concepts, theories, methodologies and ideas that help us to understand and cope with a versatile and changing scenario in teaching and learning.

In addition to this, we have explained that Education provides students with the foundation of skills and knowledge they will lean on for the rest of their lives. And as the world around them changes - be that due to changes in values, societal shifts or technological innovations - the education landscape needs to shift in response. Education is evolving to nurture students to be more connected in their lives, engaged in class and equipped for their future. This is a space where technology and pedagogy can work hand in hand to facilitate change — be that by providing teachers with tools to enhance their lessons, creating more fluid learning ecosystems, or transforming classrooms into innovative learning spaces of the future.

Moreover, we have also pointed out the necessity to redefine teachers' role and profile. We have also identified that leadership is a key quality important to develop and achieve through two other pillars: emotional intelligence and assertive communication. Both of them are important and relevant in a classroom with what we have called new subject -students. Students that are digital natives. They are people who have grown up under the ubiquitous influence of the internet and other modern information technologies. Digital natives think, learn, and understand the world around them differently from people who have not been as subjected to modern technology. They can efficiently multitask and switch from one activity to another. They are intuitive learners, learning by figuring things out instead of reading manuals. They are less likely to view people in a hierarchical structure as the Internet makes everyone seem equal. The digital generation has adopted a mindset of rapid-fire trial-and- error learning. They're not afraid of making mistakes because they learn more quickly that way. What digital natives really want is an experience.

From this perspective and taking into account the need for a change in our way of understanding teaching and learning processes, roles of each participant of what we call the classroom and the cosmovision of Education in general, we believe that is really important to know, understand, explore, and incorporate in teachers' daily practice new approaches and methodologies needed in order to meet the needs of a new generation of students with a totally different profile. Students that we have already described as new subjects with a new identity and needs, with a new way to interact and perceive reality, with a new vocation, inspiration, and passion for teaching and for going on learning are going to be the teachers' headlights that will light the way.

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IT IS VERY IMPORTANT TO POINT OUT THAT THIS FRP IS THE CONSEQUENCE OF VAST READING OF ALL THE MATERIAL AND BIBLIOGRAPHY PROPOSED BY THE CURRICULAR CONTENT OF THIS CAREER AND; THE RESULT OF READING FROM DIFFERENT SOURCES IN DIFFERENT FORMAT THROUGH ALL MY LIFE, AND FINALLY THE CONCRETE USE OF THE BENEFITS OF THE CONCEPT WE HAVE INTRODUCED IN THIS RESEARCH CALLED NETWORK THINKING.